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TABLE OF CONTENTS

	<u>Page</u>
I. Current Mapping in British East Africa	1
II. Reorganization of the Administrative Divisions in Taiwan (Formosa) Province.....	16
III. Status of Sikkim in Relation to India.....	21
IV. Brief Notices.....	25
A. New World Topographic Series at 1:1,000,000.....	25
B. The Soviet Great Sea Atlas.....	26
C. New Comisaria in Colombia.....	27
D. Colombian Road Atlas.....	28
E. Annual Reports of the Survey of India.....	30
F. Atlas of Land Utilization in Taiwan.....	32
G. Regional Atlas of Niedersachsen.....	34
H. Maps of the Belgian Congo and Ruanda-Urundi.....	35
I. National Agronomy Maps of Spain.....	36

MAPS

	<u>Following Page</u>
Taiwan: Administrative Divisions, 1951 (CIA 11889).....	17
Location Comisaria de Casanare: (CIA 11906).....	28

Note: This Bulletin has not been coordinated with the intelligence organizations of the Departments of State, the Army, the Navy, and the Air Force.

I. CURRENT MAPPING IN BRITISH EAST AFRICA¹

A. Introduction

Rapid progress has been made since the end of World War II in the development of a uniform mapping program for British East Africa, an area of about 675,000 square miles including Uganda Protectorate, Kenya Colony and Protectorate, Tanganyika Territory, and Zanzibar Protectorate. The area is located strategically in relation to the over-all geodetic framework of Africa, lying midway between the better mapped area of Egypt to the north and the Union of South Africa to the south. Furthermore, the "Arc of the 30th Meridian," the chief meridional arc of triangulation of the continent of Africa, cuts through western Uganda and the western tip of Tanganyika. The development of the uniform mapping program for the area was facilitated by the fact that all four of the territories are dependent in some degree upon Great Britain.

The impetus for the current mapping program was the establishment of the Directorate of Colonial Geodetic and Topographic Surveys (Colonial Surveys) under the British Colonial Office in 1946. The following year the Colonial Surveys undertook

1. This article is based on a field report prepared by Miss D. M. Anderson, Geographic Attache, American Embassy, Cairo, Egypt.

the preparation of uniform types of map series for the four British East African dependencies. The compilation of the maps and the preliminary aerial photography are the responsibility of the Colonial Surveys. In general, the individual territories are to provide ground control, field checks of preliminary map sheets, and supplementary compilation data. An additional source of mapping information is provided by the various military survey groups that have operated in the region. One of these, the East Africa Survey Group, prepared a map series at 1:500,000 that covers all of British East Africa and parts of surrounding areas. Although inadequate, this series provides the best available complete coverage of the region as a whole.

Each of the territories in British East Africa has a cartographic agency of some type, but standards and quality of work produced vary greatly. In all four territories, there also are active geologic survey offices that provide additional compilation data. Local private agencies that can contribute to the over-all mapping program are limited to a few tourist organizations and oil companies that issue road maps and to one large newspaper capable of printing small-sized maps in black and white.

From the point of view of mapping, cooperation among the territories of British East Africa at present is largely through the East Africa High Commission, which consists of the Governors

of Uganda, Kenya, and Tanganyika. The British Resident in Zanzibar, though not a member, sits in on the meetings and participates in discussions of regional problems. Of the various official organizations under the High Commission, about 10 deal with subjects in some way related to the mapping program.

The Colonial Surveys provided the stimulus for the program for mapping East Africa and currently are performing the major part of the work. On the completion of the map series for the region, however, its obligations will be fulfilled, and Colonial Surveys may cease to operate in British East Africa. The local and regional agencies, on the other hand, are permanent organizations. As such, they presumably will continue the work of surveying and map production and may well be the most important long-run factors in the mapping of British East Africa.

B. Local Official Mapping Agencies

1. Uganda Protectorate

The Survey, Lands and Mines Department, which was established in 1900, is the official cartographic agency of Uganda Protectorate. In quality, its work has been superior to that of corresponding agencies in the other territories of British East Africa, partly because the Uganda Government has always been in better financial position and partly because conditions under which it has operated have been more stable.

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The necessity for establishing the boundary between British and German territory was the primary factor in the appointment of a Chief Surveyor and the creation of the Survey immediately after the signing of the Uganda Agreement in 1900. In the following years, five commissions were appointed for special surveys: (1) the Anglo-German Boundary Commission, 1902-06; (2) the Uganda-Congo Commission, 1907-08; (3) the Arc of the 30th Meridian Commission, 1908-09; (4) the Anglo-German-Belgian Boundary Commission, 1911; and (5) the Anglo-Belgian Boundary Commission (Mahagi Strip), 1912-13. The most significant accomplishment of the Survey was the establishment by a joint British-Belgian survey party of a highly accurate chain of triangulation along the section of the meridian of 30°E that crosses western Uganda. This triangulation has provided a geodetic datum that has been used for all later maps made by the Survey. Since 1947 the Colonial Surveys also has tied its work to that of the Uganda Survey. Uganda today has complete map coverage at the scale of 1:250,000 and partial coverage at 1:10,000. Maps are printed by the Survey on its own press at Entebbe.

In Uganda, as in the rest of British East Africa, the need for a system of land registration has had an important influence on the local mapping priorities. The situation has been further complicated by unusual regulations pertaining to native lands and

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to mineral resources, as a result of which cadastral surveys took precedence over topographic surveys.

The Survey, in addition to collaboration with Colonial Surveys, plans to continue to make town plans and large-scale (1:10,000) maps of rural areas of economic significance. "Miscellaneous" or special-subject maps are to be produced as more personnel and equipment become available. An "Atlas of Uganda" similar to the "Atlas of Tanganyika"¹ has been planned, but no work on it has been started.

2. Kenya Colony and Protectorate

The Survey of Kenya was organized in 1903. Although a topographical section was established under the Survey in 1906, it was abolished in 1921. Work of the Survey began with very sketchy triangulation along the railroads, and at no time in its subsequent history has it operated on very sound principles. Not until the appointment of the present director has there been any real interest in developing sound programs of triangulation and topographic mapping. Although the position of the Survey at present is politically and financially precarious, the new director has made comprehensive and detailed plans for expansion. To an even greater extent than in Uganda, cadastral mapping has been favored at the expense of topographic.

1. Reviewed in Map Research Bulletin, No. 21, p. 19.

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The Survey has prepared no map series for Kenya but is co-operating with Colonial Surveys on aerial photography. The best complete coverage at the present time is the 1:500,000 series compiled and published by the East Africa Survey Group, whose headquarters is at Nairobi.

The Survey of Kenya has more ambitious plans than have the other East African territories for future mapping and possibly less chance of implementing the program proposed. The Director of the Survey has recommended that the whole of Kenya be covered by new and accurate triangulation, presumably related to the Arc of the 30th Meridian, and has stated that only after this geodetic net has been completed can adequate topographic coverage for Kenya be prepared. As of January 1950 this proposal had not been approved or even received with much enthusiasm by the Kenya Legislature.

3. Tanganyika Territory

The official cartographic agency of Tanganyika has operated under a variety of conditions and names but is currently known as the Surveys and Town Planning Department of Tanganyika. The early history of the Department is vague, but it may have been started in connection with the German surveys for the town sites of Dar es Salaam and Tanga. Under the British Mandate (1921-46) and also under the British Trusteeship (since 1946), all mapping priorities have been set in relation to special purposes, usually related to agricultural or economic development.

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There has been some attempt, however, to cope with the problems of preparing complete and accurate topographic map coverage of the territory.

Early triangulation was not referred to the Arc of the 30th Meridian. Recently, however, ground crews of the Colonial Surveys have been working with the Department on an adjustment between Tabora (Tanganyika) and the Arc, and it is hoped that a complete tie-in can be made eventually. Under the present director the Department plans to tie all new maps of Tanganyika to the triangulation of the Arc of the 30th Meridian and to adjust all previously published map sheets to it as they are revised or when the size of the staff permits.

The Surveys and Town Planning Department of Tanganyika has flown some special missions but has made no attempt to provide complete photographic air coverage of the entire territory. In the 1930's, air cover also was flown for Pemba by the Department, but the photographs were never processed for mapping.

The only complete coverage of Tanganyika Territory published by the Surveys and Town Planning Department is at 1:1,000,000. Local coverage at other scales is spotty, uneven in quality, and of widely different dates. The Department, using British sources in conjunction with local field surveys, is continuing its work on the Africa-Tanganyika Territory series at 1:250,000, 1:125,000, and 1:25,000, all of which can be considered basic scales. A

lithographic press has been installed, and the Department can now do its own printing at Dar es Salaam. Topographic maps produced in Tanganyika Territory will apparently be limited in quantity for some time. Although the Surveys and Town Planning Department has no great administrative problems, it faces a task that is much too large for its present staff.

The Department plans to continue not only its work with the Colonial Surveys but also the compilation of its topographic series at 1:250,000, 1:125,000, and 1:25,000, possibly with emphasis on the last. It is expected that town planning will become an increasingly important function of the recently reorganized department.

4. Zanzibar Protectorate¹

The Land Survey Office of Zanzibar, which is under the Public Works Department, has a small staff that produces maps only as needed and only in sufficient quantity for local use. Two maps produced by the Land Survey are used as bases for most of the other work being done in Zanzibar -- a planimetric map of Zanzibar and Pemba, at 1:126,720, published in 1943, and a 51-sheet topographic series of Zanzibar Island only, at 1:10,560, published between 1933 and 1937. If Zanzibar and Pemba are to be included in an over-all survey of East Africa, the responsibility

1. See also Map Research Bulletin, No. 19, p. 14.

probably will fall upon the Colonial Surveys or some military mission rather than upon the local Land Survey Office. The Land Survey, however, adequately serves the present local needs. Multicolored maps are printed for the Protectorate in England and black-and-white maps at a government plant located on Pemba.

C. British Official Mapping Organizations

1. Colonial Geodetic and Topographical Surveys

The Directorate of Colonial Geodetic and Topographical Surveys, with headquarters in Bushy Park, Oxfordshire, England, was established in 1946 by the British Colonial Office and in 1947 began working in the British Colonies in East Africa from its base in Nairobi.

In cooperation with radar and field crews sent out by the Colonial Surveys, a detachment from the 80th Squadron of the Royal Air Force has been flying aerial photography since May 1947. All the Colonial Surveys crews have relied on the survey departments of the countries in which they have worked for ground-control data and for advice on local conditions.

Field data are sent to England for compilation, drafting, and reproduction. The first maps prepared are planimetric preliminary sheets at 1:50,000 that show photo stations and vegetation in general. These sheets and a matching set of aerial photographs are then sent to the field for checking. At the local surveys, vegetation is differentiated according to type, place

names are checked, and additional pertinent information is noted. The work sheets are then returned to England for final drafting and printing.

Originally, only two series of maps, the preliminary black-and-white planimetric sheets at 1:50,000 and the final full-color lithographed sheets at various scales, were to be printed. The need for contoured sheets at 1:50,000, however, soon became apparent. The Colonial Surveys therefore added contours to the 1:50,000 planimetric sheets and is issuing them as "Preliminary Plot" maps. This practice has slowed down the output of final sheets but provides a useful intermediary map series. As yet only one sheet, Kenya-Ongabet, has been published in final form, but a number of the sheets in the other two series have been issued.

The scales of the final full-color lithographed sheets vary according to the character of the country. For Kenya, all the heavily populated areas will be mapped at 1:62,500, fringe areas at 1:125,000, and uninhabitable areas at 1:250,000. For heavily populated areas in Uganda and Tanganyika, the larger scale of 1:30,000 will be used.

The program for aerial photography of British East Africa has progressed steadily since 1947. As of January 1950, most of Kenya and almost all of Uganda had been photographed, but only one sheet had been lithographed at final scale. A larger area but a relatively smaller part of Tanganyika had

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been photographed. In Tanganyika the Colonial Surveys has cooperated with the Overseas Food Corporation to the extent of giving highest priority to the areas selected for reclamation under the "Groundnut Scheme." Since these areas have always had low mapping priority in the Surveys and Town Planning Department of Tanganyika, the cooperation between the Colonial Surveys and the local cartographic agency has not been as close as in Kenya and Uganda. Air photography for Zanzibar was completed in 1947, but Pemba was not covered at that time, since photography had been flown in the 1930's. Air photography of Zanzibar Protectorate now has a low priority.

The work of the Colonial Surveys in British East Africa began in Uganda and in all cases is referred to the Arc of the 30th Meridian. In other areas, local official triangulation was less satisfactory, but some new triangulation has been made for the new map series of the Colonial Surveys. Although the air photography and current field work are professionally sound, the ground control in some of the territories is spotty, and the maps to be based on it will not be of uniform quality throughout. In spite of the shortcomings, however, the Colonial Surveys maps of British East Africa, when published, will provide the most accurate, consistent, and recent coverage of the area.

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2. Military Surveys

Between 1900 and 1940 a number of fragmentary surveys were made in parts of British East Africa, for the most part by the Royal Engineers, in connection with boundary disputes. Only one military group has made any significant contribution to the mapping of East Africa from the point of view of completeness and recency of coverage. The Survey Directorate of the East Africa Command, commonly known as the East Africa Survey Group (EASG), has been working in eastern Africa from its headquarters in Nairobi since 1940.

The EASG has prepared complete coverage at 1:500,000, not only of British East Africa but also of all or large parts of Nyasaland, Northern Rhodesia, Southern Rhodesia, Mozambique, the Somalilands, Ethiopia, Eritrea, and the Anglo-Egyptian Sudan. The accuracy of the EASG series at 1:500,000, however, varies greatly from sheet to sheet. Since no comprehensive triangulation net was established for the map, the bases used in connection with the field work were inadequate and inconsistent. Nevertheless, the EASG map provides complete coverage of British East Africa at one scale and is the best series available to date.

The EASG has supplied sheets for the British War Office continental coverage at 1:1,000,000, 1:2,000,000, and 1:3,000,000. It also has made single sheets and series of a few sheets each at 1:250,000, 1:125,000, 1:50,000, 1:25,000, and even larger scales. Most of the work on all EASG series was done between

RESTRICTED

1940 and 1945, but a few sheets have been revised since that date. Very little, if any, mapping is being done by the EASG at present, but a map repository and library is maintained at Command Headquarters in Nairobi.

In 1947, the year the Colonial Surveys began its air work, some air coverage in the vicinity of Mt. Kenya and Mt. Elgon was flown by a Middle East Squadron of the Royal Air Force based at Fayid, Suez Canal Zone.

D. Related Sources of Maps and Mapping Data

1. Official

a. Geological Surveys

Since water supply and mineral deposits are basic factors in the economy throughout British East Africa, the need for comprehensive geological surveys has been more apparent to laymen and government officials than the need for topographic surveys. The Mines and Geology Department of Kenya, the Geological Department of Tanganyika, and the Geological Survey Department of Uganda are very influential branches in their respective governments and have had less difficulty obtaining adequate budgets than have the topographical surveys. On an informal basis, the geological units of the three countries are cooperating closely, and it is quite possible that they may eventually be grouped together under one director who would be responsible to the East Africa High Commission. Such

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an administrative change probably would not affect greatly the output of geological maps. The staffs of all three departments have been increased recently, and the three directors expect to publish an increasing number of geological reports and maps.

b. East Africa High Commission

The East Africa High Commission is the chief official organization concerned with the common problems of the region. Although interterritorial cooperation began in 1924, the High Commission in its present form was not organized until 1948. Of the 20 to 30 departments, committees, services, and similar official organizations administered by the East Africa High Commission, about 10 either produce special-subject maps or collect data of significance to the mapping program. These organizations are as follows:

The Desert Locust Survey

The East African Railways and Harbours Administration

The East African Posts and Telegraphs Department

The East African Directorate of Civil Aviation

The East African Air Transport Authority

The East African Meteorological Department

The East African Statistical Department

The East African Tsetse Reclamation Department

The East African Research Services

The East African Inter-territorial Languages Committee

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2. Private Agencies

There are very few semiofficial or commercial sources of maps or mapping data in British East Africa, but an occasional special-subject map may be expected from organizations interested in promoting tourist business. Among these are the East Africa Tourist Travel Association and the Royal East African Automobile Association, both with headquarters at Nairobi, and the Tourist and Trade Committee of Zanzibar.

The East African Standard, the largest newspaper in East Africa, prints a number of publications for local use, including small maps, and is capable of printing black-and-white maps up to 18 by 24 inches.

The usual commercial road maps are available through the Caltex and Shell Oil Companies, but editions before 1950 are notably unreliable. The Shell Oil Company scheduled a new map for publication in 1950. The map has been more carefully field-checked and revised than any of the previous editions, but even in the opinion of the company's local officials, it still cannot be considered a good map.

A few special maps also have been printed in small quantities by commercial firms, on a contractual basis in some cases, for various departments of the local governments for limited official use or for incorporation in official reports. Information about some of these maps or the maps themselves have been brought to the attention of the survey offices only by accident.

II. REORGANIZATION OF THE ADMINISTRATIVE
DIVISIONS IN TAIWAN (FORMOSA) PROVINCE

Early in 1950 the Taiwan Provincial People's Council recommended a revision of the administrative areas of Taiwan to insure more efficient organization in local self-government. The revision, which increased the number of hsien (counties) from 8 to 16 and reduced the number of shih (municipalities) from 9 to 5, was promulgated on 16 August 1950. The following tabulation gives for Taiwan the present shih and hsien and the area and population of each.

Capital: T'ai-pe1

	<u>Shih</u>	<u>Area in Sq. Km.</u> ¹	<u>Population</u> ²
1.	基隆 Ch1-lung	132.30	145,236
2.	高雄 Kao-hsiung	110.59	281,250
3.	台中 T'ai-chung	163.43	206,537
4.	台南 T'ai-nan	175.65	229,557
5.	台北 T'ai-pe1	66.99	503,975
	<u>Shih totals</u>	648.95	1,366,555

1. Chart on (Taiwan Provincial Map Showing Administrative Regions); 1:600,000; Chang Chung Yung, Editor; 5 September 1950; CIA Map Library, Call No. 72422.
2. "Table Showing Results of Elections for Hsien Councilors in Formosa," Enclosure No. 1 to Despatch No. 128, Taipei, 5 March 1951.

	<u>Hsien</u>		<u>Area in Sq. Km.</u>	<u>Population</u>
1.	彰化	Chang-hua	1,061.46	691,606
2.	嘉義	Chia-i	1,951.39	529,917
3.	新竹	Hsin-chu	1,482.47	355,010
4.	花蓮	Hua-lien	4,628.57	171,730
5.	宜蘭	I-lan	2,137.46	256,246
6.	高雄	Kao-hsiung	2,835.68	446,806
7.	苗栗	Miao-li	1,820.31	339,639
8.	南投	Nan-t'ou	4,106.44	297,893
9.	澎湖	P'eng-hu	126.86	80,012
10.	屏東	P'ing-tung	2,775.60	467,032
11.	台中	T'ai-chung	2,051.62	464,647
12.	台南	T'ai-nan	2,003.59	610,769
13.	台北	T'ai-pei	2,257.49	589,438
14.	台東	T'ai-tung	3,512.25	112,690
15.	桃園	T'ao-yüan	1,267.23	343,426
16.	雲林	Yün-lin	1,290.84	512,908
	<u>Hsien totals</u>		35,312.26	6,269,769
	<u>Shih and Hsien totals</u> ¹		35,961.21	7,636,324

1. Area and population totals were taken directly from the sources listed and are not the result of independent addition.

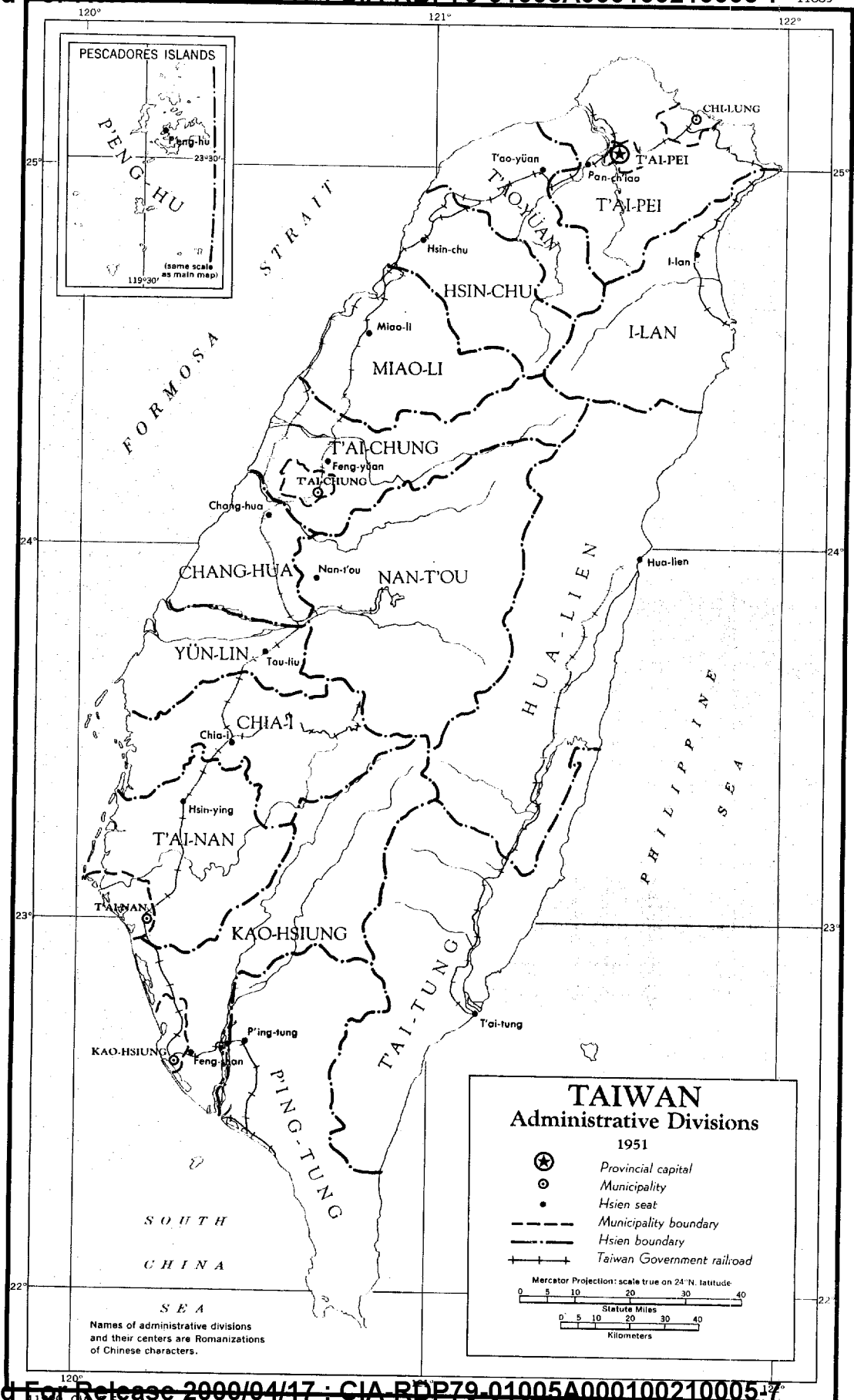
The seats (administrative centers) of 11 of the hsien have the same names as the hsien. The other five are 鳳山 Feng-shan, seat of Kao-hsiung Hsien; 豐原 Feng-yüan, seat of T'ai-chung Hsien; 新營 Hsin-ying, seat of T'ai-nan Hsien; 板橋 Pan-ch'iao, seat of T'ai-peh Hsien; and 斗六 Tou-liu, seat of Yün-lin Hsien.

The names given for the administrative divisions mentioned are romanizations of Chinese characters. The same forms are used on the accompanying map (CIA 11889).

The reorganization of the minor civil divisions involves changes of boundaries, names, and status. These changes are shown on several Chinese maps now available.¹ Three of the former hsien, and the ch'ü² that comprised them remained unchanged. From the remaining five, new hsien were created by removing two or more ch'ü from their former jurisdiction and combining them to form new hsien. Differences between the present administrative divisions and those established by the Chinese Government subsequent to its

1. The Map of Taiwan; 1:600,000; Taiwan Provincial Information Office; 25 October 1950; Army Map Service Call No. 1-28-27374-600. (Taiwan Provincial Map Showing Administrative Regions); 1:500,000; distributed by I Shu Society, Taipei; 20 October 1950; CIA Map Library, Call No. 72400.

2. The ch'ü boundaries are the same as the former Japanese gun (county) boundaries.



occupation of Taiwan after the Japanese surrender are apparent from the following descriptions:

- (1) Hsin-chu Hsien has been divided into three hsien: Hsin-chu in the center, T'ao-yüan in the northeast, and Miao-li in the southwest.
 - (2) Hua-lien Hsien retains its former boundaries.
 - (3) Kao-hsiung Hsien has been reduced in size by the loss of four ch'ü in the south, which now form the new P'ing-tung Hsien.
 - (4) P'eng-hu Hsien, which is made up of the islands west of Taiwan, remains unchanged.
 - (5) T'ai-chung Hsien has been divided into three hsien. The southwestern part is now called Chang-hua Hsien and the southeastern part Nan-t'ou Hsien.
 - (6) T'ai-nan Hsien has been divided into three hsien: T'ai-nan in the south, Chia-i Hsien in the center, and Yün-lin Hsien in the north.
 - (7) T'ai-pei Hsien lost three ch'ü in the south, which were combined to form the present I-lan Hsien.
 - (8) T'ai-tung has retained its former boundaries.
- Chang-hua, Chia-i, Hsin-chu, and P'ing-tung, four former shih, have been reduced in status from municipalities under the direct jurisdiction of the province to hsien seats of the hsien in which they are located.

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The local administrative organization of the hsien and shih in Taiwan and the various units under their jurisdiction are described in the regulations governing these units.¹ The units under the hsien are hsiang (villages and their environs) and chen (towns). The shih are subdivided into ch'ü (precincts, which are not to be confused with the ch'ü that are subdivisions of the hsien). The regulations also provide for the establishment of new municipalities under the jurisdiction of the hsien.

1. "Principles Governing the Enforcement of Self-Government in Hsien and Municipal Areas in Taiwan Province" (Translation), Enclosure 3 to Despatch No. 128, Taipei, 5 March 1951.

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III. STATUS OF SIKKIM IN RELATION TO INDIA

Sikkim, located between Nepal and Bhutan along the northern border of India and astride the two main routes between India and Tibet, occupies a position of great strategic importance.¹ India has therefore been very cautious in establishing final political relations with Sikkim. In the exercise of this caution, some extra-treaty measures have been taken that have tended to confuse relations between Sikkim and India, and a related problem has developed regarding the cartographic treatment of Sikkim.

The equivocal status accorded to Sikkim in Indian sources published since the Constitution came into effect on 26 January 1950 complicates the issue still further. Official Indian maps of the new states that comprise the Republic² show an international boundary between India and Sikkim, thus giving the latter the appearance of a separate political entity. For purposes of enumeration in the 1951 census of India, Sikkim is listed under the category of "other territories," along with the Andaman and Nicobar Islands. In the Indian and Pakistan Yearbook and Who's Who, 1950, Sikkim is

1. For a brief summary of present relations between India and its northern border states, see "The Republic of India, 1950," Map Research Bulletin, No. 15, April 1950, pp. 9-10.

2. India: Position of Indian States under the New Constitution; 1:4,435,200; Survey of India; 1950; CIA Map Library, Call No. 69582. India: Political Divisions in the New Republic; 1:4,435,200; Survey of India; 1950; CIA Map Library, Call No. 72118.

not treated in detail, either as an integral part of India or, like Nepal and Bhutan, as a northern border state.

Before Indian independence was attained in 1947, Sikkim was a protectorate of the United Kingdom, the latter having the legal right to control all Sikkimese affairs, both foreign and internal. Basically, this relationship was not very different from those between other princely states and the United Kingdom. The 1947 India-Sikkim Standstill Agreement extended previous relationships until a new treaty could be signed, thereby transferring to India the former British rights to control Sikkimese affairs. Unlike the other states that acceded to the Union after 1947 and that were placed under the India Ministry of States, Sikkim was placed under the Ministry of External Affairs.

Attempts to establish a popular government in Sikkim having proved unsuccessful, the Indian Government intervened in June 1949 at the request of the Maharaja of Sikkim and took over control of the internal administration. Indian authority was to be exercised through a Dewan (adviser or chief minister) residing in Gangtok. Under the original terms of the transfer of powers from the Maharaja to the Dewan, the latter was to have ultimate if not complete control of the internal administration of Sikkim until stable conditions were restored and a popular government was established. According to a provisional agreement of March 1950, the

internal autonomy of Sikkim was "subject to the ultimate responsibility of the Indian Government for the maintenance of good administration and law and order."¹

On 5 December 1950 an India-Sikkim treaty was signed which canceled the 1947 Standstill Agreement and established the present legal relationship between Sikkim and the new Republic of India.² Under Article II of the new treaty, "Sikkim shall continue to be a Protectorate of India and, subject to the provisions of this Treaty, shall enjoy autonomy in regard to its internal affairs." The main provisions of the treaty defining the protectorate powers of India deal with the specific powers that were exercised by India under the Standstill Agreement. These provisions, the only ones that directly limit the internal autonomy of Sikkim, give India complete control of Sikkim's external affairs and communications as well as responsibility for its defense and territorial integrity. India also agrees to pay Sikkim 300,000 rupees annually as long as the treaty terms are observed. The new treaty has no clause defining the extent of Indian control or supervision of the internal administration of Sikkim, such as

1. This provisional agreement was discussed in a press release from the Indian Information Service at New Delhi on 20 March 1950 (FBID), 21 March 1950, p. FFF-1).

2. The text of the 5 December 1950 treaty and a press note containing background information were distributed by the Press Information Bureau of the Government of India, and both were transmitted with US Embassy Despatch No. 1295 from New Delhi 7 December 1950.

appeared in the provisional agreement of March 1950. At the time of the signing of the December treaty, according to the press note released with the treaty text, the Dewan with the assistance of an advisory council was still in the process of reorganizing the government.

Suggested Portrayal of Sikkim on Maps of India

The extent of Indian control over the internal affairs of Sikkim warrants the continuation of the practice of including Sikkim in the Republic of India for the present. To give the most realistic picture of administrative relationships between India and Sikkim, it is suggested that the international boundary of India encircle Sikkim on the north and that the southern boundary of Sikkim be represented by the same symbol that is used for the state boundaries of India.

IV. BRIEF NOTICES

A. New World Topographic Series at 1:1,000,000

The British War Office has designed a new style of topographic map at 1:1,000,000 for use on the ground. During World War II, many of the maps at this scale produced by the War Office were of the "Army/Air" type intended for air navigation as well as for planning and intelligence work on the ground. After the war, charts at 1:1,000,000 designed according to international specifications and exclusively for air use became more readily available. The dual-purpose maps then became obsolescent for air use; they also have certain obvious shortcomings for ground use. For these reasons, the War Office designed a clearer and more detailed type of map for ground use only, which contains more topographic information and place names.

The new series, designated GSGS 4646, replaces GSGS 2758, 2555, and 2465. In projection, sheet-line system, and method of numbering sheets, GSGS 4646 is identical with International Map of the World, but the following points of difference distinguish it from the IMW series:

1. Brown instead of black is used for the border, grid, railroads, and a few other items.
2. Layering is especially light and transparent, and several shades of a few colors are used rather than a number of contrasting colors.

3. Boundaries are printed in transparent purple tint.
4. Roads are classified by importance of routes rather than by surface or type of construction.
5. The reverse side of the map contains one or more glossaries and an index of all places named on the map, located by half-degree squares.

Of the 23 sheets (most of which are for the Near East) projected in 1948, 2 have been received -- Cairo and Milano -- both of which may be borrowed from either AMS or CIA Map Library. They were the first to be compiled because the areas covered offered widely different types of topography on which to try out the new technique. An Army Map Service reproduction of the Milano sheet without elevation tints is now available, and that for Cairo will be available in a few months.

B. The Soviet Great Sea Atlas

The publication in 1950 of Volume I of the Great Sea Atlas (Bol'shoy Morskoy Atlas) was announced by a TASS radio broadcast on 16 March 1951. According to Soviet sources, the volume contains navigational charts and general geographical reference maps that give detailed descriptions of the seas and oceans of the world. This publication, though requested, is not as yet available in the United States.

When completed, the atlas will consist of three volumes that will show land masses as well as details of the sea areas. All three are being compiled and published under the authority of the

Chief Administration of Geodesy and Cartography (GUGK), attached to the Council of Ministers, USSR. Reports of compilation of the atlas first appeared in 1946. Although only one volume has been issued, newspaper reports indicate that some of the maps of Volume II have been printed in final form.

The Great Sea Atlas should be particularly noteworthy for its depiction of the Soviet Arctic seas. In October 1949 the Soviet press carried a release attributed to the late Lev S. Berg, an eminent Soviet geographer, which stated that the atlas will show cartographically significant changes in the configuration of the northern coastline of Siberia as well as other geographic discoveries resulting from intensive research being conducted by the Soviets in the Arctic areas.

C. New Comisaría in Colombia

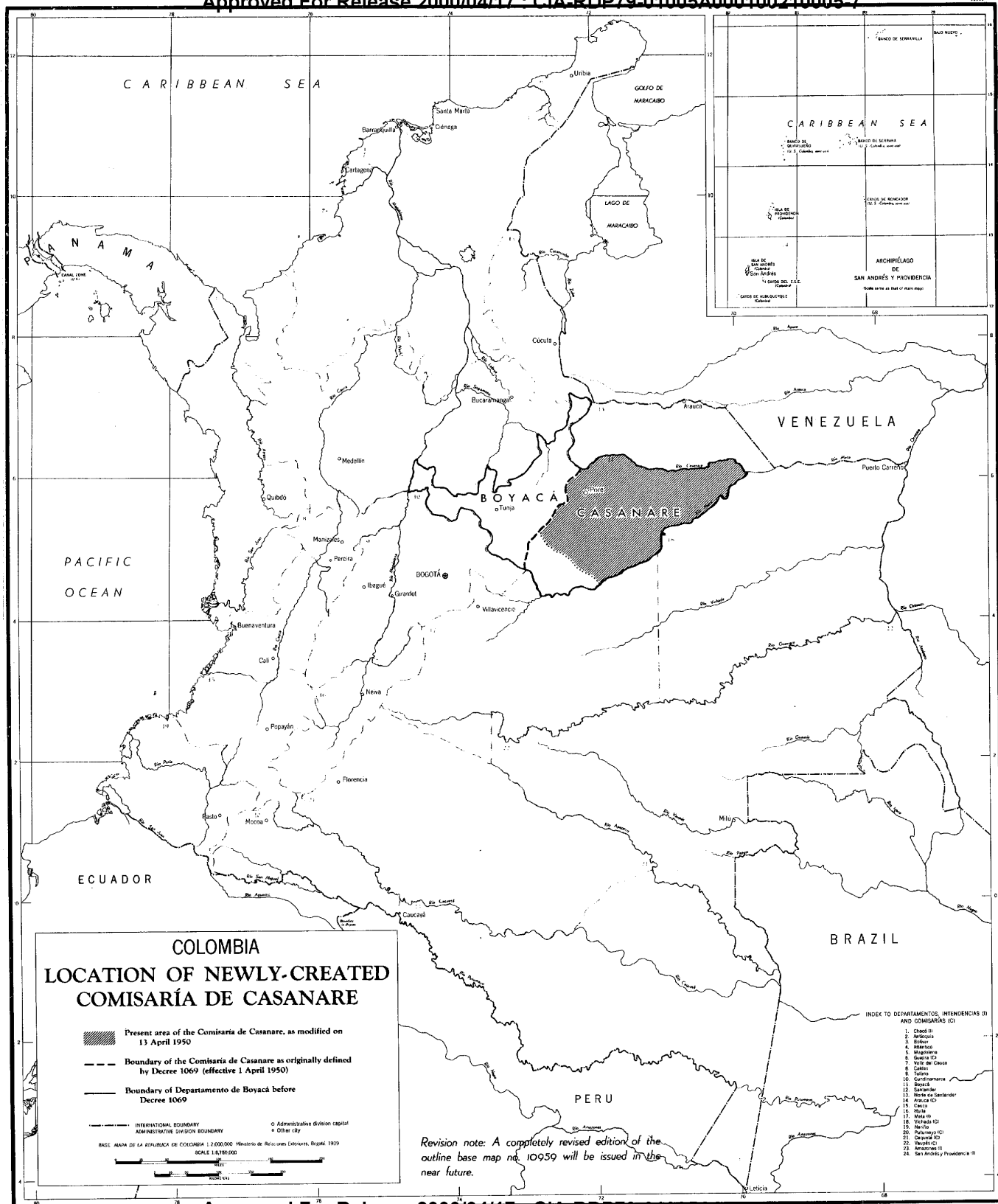
A new first-order administrative division, the Comisaría de Casanare, was created in Colombia on 1 April 1950. The comisaría, formerly the eastern half of the Departamento de Boyacá, was created to establish better administrative control over a sparsely populated plains area. Because of the remoteness of the area, effective control had been impossible from the departamento capital at Tunja. The capital of the new comisaría is located at Pore.

The boundary specified in Decree No. 1069 of 1950, under which the new comisaría was established, was subsequently modified by a

special decree issued on 13 April 1950. The accompanying map, Location Comisaría de Casanare at 1:6,700,000 (CIA 11906) shows the boundaries of the new administrative division as modified on 13 April 1950 and also outlines the original boundary as set forth by Decree No. 1069. The Mapa de la República de Colombia, prepared in 1950 by the Instituto Geográfico Militar y Catastral, also presents the modified boundary of the Comisaría de Casanare but at larger scale (1:2,500,000) and is available on loan from the CIA Map Library (Call No. 68595). The two maps mentioned are the only known maps of Colombia that show the correct boundary of the new comisaría. On the maps in the Atlas Vial (see below) the boundary of Casanare is delineated according to the provisions of Decree No. 1069 without the subsequent modifications and is therefore incorrect.

D. Colombian Road Atlas

In 1950 the Dirección General de Ferrocarriles y Carreteras Nacional published the Atlas Vial, a road atlas of Colombia (CIA Map Library, Call No. aD121-28 .C6) that contains the most recent official information available in map form on roads and railroads of the country. The atlas also is significant because it presents valuable information on boundaries, place names, and hydrography -- in most cases at larger scale than on other available maps.



The Atlas Vial consists of maps of the 25 first-order administrative divisions -- departamentos, intendencias, and comisariás -- and a general cover map showing the republic as a whole. The information presented on the individual sheets is confined to the limits of the particular administrative division concerned, with no carry-over to adjacent areas. Although the maps range in scale from 1:500,000 to 1:1,500,000, the majority fall within the 1:750,000 to 1:1,000,000 range.

Road information is presented in detail and includes national trunk roads, national secondary roads, local roads, roads under construction in each of these categories, selected private roads with ownership indicated, and road distances from point to point given in kilometers. Railroad and cable routes are shown but are not differentiated according to gauge or ownership. Although selected tunnels and bridges are indicated, little consistency was used in their selection. In most cases the road and railroad information presented is confirmed by other sources.

Airfields are located by crude airplane symbols but are not identified as to type or facilities available. A comparison with the US Air Force Pilot's Handbook for South America indicates that locations are generalized and that coverage is spotty.

Both international and first-order internal boundaries are shown, but the most recent modifications in the boundary of the Comisaría de Casanare (13 April 1950) are not incorporated. The drainage pattern is given clearly and in considerable detail, with

a large proportion of the streams and lakes named. Landforms over broad areas are not indicated, but spot heights are given in meters, and a few mountain peaks are shown by crudely drawn hachures. For the more densely populated areas of the country, the place-name coverage given compares favorably with that of the American Geographical Society Map of Hispanic America at 1:1,000,000. For the less densely populated sections, the coverage is less satisfactory.

The most unsatisfactory feature of the atlas is the use of a 2-degree grid based on Bogotá. The interval is so large that on individual maps there is seldom a sufficient number of coordinates for purposes of orientation.

E. Annual Reports of the Survey of India

In 1947 the Survey of India resumed publication of its annual reports, each of which is issued in two volumes -- a technical report and a general report. Technical Report, 1947, Technical Report, 1948-49 (Part III, Geodetic Work), and General Report, 1948-49 are now available at the CIA Map Library. Although the general report for 1947 has been published, it is not yet available in Washington. A supplement to General Report, 1948-49, reported to be in publication, describes the "Restricted" surveys and maps of the Survey of India. The 1949-50 annual report also is said to be ready for publication. To cover the World War II period

and up to 30 September 1946, a special War Report is now in preparation. When all are available, the reports will give a comprehensive summation of the 1940-50 organization and activities of the Survey of India.

The reports that have already been received fill in a large part of the gap in information on postwar and post-partition activities of the Survey of India. The geodetic portions are especially valuable because they cover the entire period from 1939 to 1949 and present much information on geodetic control in all of South Asia.

Technical Report, 1947 consists of three sections: Part I, Topographical and Other Surveys; Part II, Map Publication and Office Work; and Part III, Geodetic Work. Parts I and II are brief and are combined into one thin volume, which consists of technical notes on topics such as areas of surveys, costs per unit, and survey techniques for the period 1 October 1946 to 14 August 1947. Two index maps at 1:12,000,000 are included, the first showing surveys and compilations since 1905 and the second locating surveys in progress. Although the maps cover all of pre-partition India, the information is as of the date of partition, 15 August 1947. Part III is a separate and larger volume that summarizes geodetic work carried out between 1 October 1939 and 30 September 1947 in India and neighboring countries from Syria to Malaya. The volume includes 19 excellent maps at various scales providing geodetic information on India and neighboring countries.

Only Part III, Geodetic Work, of the Technical Report, 1948-49 is available in Washington. This volume summarizes the geodetic work of the Survey of India from 1 October 1947 to 31 March 1949. About 30 maps, at various scales, present geodetic information, and a map at 1:5,000,000 (dated 1950) shows average elevations in India by half-degree squares.

The General Report, 1948-49 is issued in one volume and covers the period from 15 August 1947 to 31 March 1949. The post-partition organization and activities of the Survey of India are described, and much information on surveys and map publication is presented in tabular form. Seven index maps show the status of topographic surveying and of map compilation and publication as of 31 March 1949.

F. Atlas of Land Utilization in Taiwan

An Atlas of Land Utilization in Taiwan, published by the National Taiwan University, T'ai-pei, 1950, is now available at the CIA Map Library (Call No. aH445 .C5 1950). The atlas appears to have been modeled after the standard work on China Proper, Land Utilization in China, by J. Lossing Buck and associates. The volume is remarkable in being primarily the work of one man, Cheng-siang Chen (Wade-Giles romanization, Ch'en Cheng-hsiang). According to the preface, Dr. Chen compiled the volume and prepared the maps during the years 1947-50, largely on the basis of answers to questionnaires sent to local authorities and on personal travel, amounting to some

6,000 miles, throughout the island. Returns were obtained for minor civil divisions to the level of the chen and hsiang (semiurban and rural townships), which number about 300. The data used are mainly for 1948 and 1949, but some data for the period of Japanese rule are included for the purpose of comparison.

In addition to 164 monochrome maps at scales of 1:1,360,000 and 1:3,000,000, the atlas contains 8 aerial photographs of various types of land use and 5 tables. The maps, but not the tables, contain complete English translations of the Chinese text. Slightly more than half the maps deal with individual crops, 37 maps being devoted to paddy and upland rice alone. Among the other crops treated in considerable detail are tea, sugarcane, pineapples, and bananas. Apart from specific crops, the major subjects treated are frequency of cropping and type of cultivation, size of holdings, use of livestock, population density, and climate.

Most of the maps present data for minor civil divisions by means of dots or ruled patterns of graduated intensity. In nearly all cases the maps using ruled patterns achieve good contrast and satisfactory progressions in intensity, but the dot maps in many cases do not show gradation satisfactorily in higher intensities because of the large size of dots.

An accompanying volume of text entitled Land Utilization in Taiwan, also by Dr. Chen, has been published in Chinese and English, but it is not yet available in Washington.

G. Regional Atlas of Niedersachsen

Although there are no postwar economic atlases for Germany as a whole, three regional atlases similar to those published before the war have been issued for individual Länder (states) since 1948. The most recent of these is Atlas Niedersachsen 1950, edited by Dr. Kurt Brüning and published by Walter Dorn, Bremen (CIA Map Library, Call No. F304 .12d 1950). In its wide range and thoroughness of treatment of special subjects, the atlas of Niedersachsen excels the atlas of Bavaria published in November 1948 and the atlas of Schleswig-Holstein published in August 1949, both of which are available in the CIA Map Library. The excellence of the atlas is not without precedence, since prewar Niedersachsen was better mapped than any other part of Germany as a result of a series of atlases of the area published after 1934.

Subjects covered by the 508 maps in the new Niedersachsen atlas include terrain, political administration, hydrography, soils, geology, changes in the coastline, climate, vegetation, population, religion, settlements, housing, public welfare, unemployment, public health, occupations, tax receipts, quality and supply of water, electricity and gas supply, agriculture, forestry, fishing, manufacturing, service industries, mining, trade, transportation, history, education and culture, dialects, and dress. Most of the maps are at the scales of 1:800,000 and 1:1,600,000. Except for the historical maps and others

introduced for purposes of comparison, the most recent postwar data available were used. Consequently, the dates of the maps vary somewhat. Sources of statistical data are given in all cases, and an English translation of the main subject covered is given in the upper right-hand corner of each atlas page.

A number of printers, as well as many individuals and government agencies, were involved in the preparation of the atlas. The use of nine printing establishments contributed to the high quality of the atlas, since each was called upon to supply maps of the type it was best qualified to produce.

H. Maps of the Belgian Congo and Ruanda-Urundi

Between 1948 and 1950 the Institut Royal Colonial Belge issued six maps that are to be included in Atlas General du Congo et du Ruanda-Urundi (CIA Map Library, Call No. aE302.15 1948). The individual maps are being released in loose-leaf form as they are published. Together, they will form a valuable addition to the cartography of the colony.

The maps received to date are (1) a general map; (2) Carte des Explorations; (3) Carte Phytogéographique; (4) Carte des Parcs Nationaux et Réserves; (5) Carte des Subdivisions Administratives, a sheet containing six maps that show administrative divisions as of 1888, 1895, 1910, 1912, 1926, and 1933; and (6) Carte Administrative, showing the situation as of 1 January 1949. The general map is at the scale of 1:3,000,000, and the historical maps are at 1:15,000,000; the other four are at 1:5,000,000. It is reported that the Carte

Géologique for the atlas also has been published, but it has not yet been received. Each map is accompanied by two or more pages of descriptive notes printed in French and Flemish. The general map also has a gazetteer of approximately 5,000 names arranged alphabetically.

I. National Agronomy Maps of Spain

In recent weeks the CIA Map Library has received sheets of the Spanish Mapa Agronómico Nacional series at 1:50,000 (Call No. 524-1, 66097) for four areas within the agricultural region of Zaragoza. The series is being compiled by the Ministry of Agriculture, using the corresponding sheets of the Mapa Topográfico Nacional at the same scale as bases.

Each of these areas -- Alagón (No. 354), Lecifina (No. 355), Zaragoza (No. 383), and Fuente de Ebro (No. 384) -- is completely covered by three multicolored sheets showing the following aspects of the local agronomy: soil zones, cultivated areas and forests, and jurisdictional limits of the Asociaciones de Regantes (irrigation districts).

The agronomic maps are accompanied by a four-volume Memoria on the Comarca de Zaragoza, dated 1940, that contains many photographs, sectional maps, charts, and graphs. The subjects covered are: Volume I. Physiography, communication and transportation, and climatology; Volume II. Geobotany, soil characteristics, and other

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details of soils by areas within the Zaragoza region; Volume III.

Economic and statistical studies on agricultural production; and

Volume IV. Production of cattle and other farm animals, industrial agriculture, and information on social factors and principal crops.

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